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APPLICATION N	io.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
08/948,328	*	10/10/1997	DAVID SIMPSON		6864	
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Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)					
	08/948,328	SIMPSON ET AL.					
Office Action Summary	Examiner	Art Unit					
	Allan Hoosain	2645					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on Resp	onse, 8/28/01.						
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,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-27 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
Attachment(s)							
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa						

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-3,7,9,11-12,14 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Tel (US 5,943,648).

As to Claims 1-3, with respect to Figures 1-2, Tel teaches a system comprising:

a server, 102, coupled to a data communication network, 124, said server being programmed to execute sequences of program instructions for:

- (a) obtaining textual information for forming messages for end users (a plurality of subscribers) (Figure 1, label 126 and Col. 3, lines 43-48),
- (b) performing a significant portion of a text to speech process to convert the textual information of at least one of the messages to formant data and supplemental data (speech synthesizer instructions) (Figure 1, label 128 and Col. 4, lines 29-34), and
- (c) transmitting the formant data and supplemental data (speech synthesizer instructions) over the data communication network (Col. 5, lines 57-65); and

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a subscriber terminal for receiving the formant data and supplemental data (speech synthesizer instructions) via the data communication network (Col. 6, lines 1-9), said subscriber terminal comprising a speech synthesizer for synthesizing a speech wave form signal representing the at least one message from the speech synthesizer instructions (Col. 6, lines 10-14).

As to Claim 7, **Tel** teaches a system as in Claim 1, further comprising an inherent e-mail system because electronic mails are received (a mail system) for receiving electronic mail (mail messages) for subscribers and supplying the mail messages as the textual information to the server for conversion and transmission to the subscriber terminal (Col. 3, lines 60-65).

As to Claim 9, Tel teaches a system as in Claim 1, further comprising a unified message management platform for receiving mail messages for subscribers in electronic form and voice form (a plurality of different formats) including electronic mail (text format), and voice form (at least one other format), converting mail messages from the at least one other format to the text format, and supplying the text format mail messages to the server as the textual information for conversion and transmission to the subscriber terminal (Col. 7, lines 7-22).

As to Claim 12, with respect to Figures 1-2, Tel teaches a network server, comprising:

a computer, 102, coupled to a data communication network, 124, said computer being programmed to execute sequences of program instructions for:

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(a) obtaining textual information for messages for end users (a plurality of subscribers) (Figure 1, label 126 and Col. 3, lines 43-48);

- (b) performing a significant portion of a text to speech process to convert the textual information of the messages to formant data (speech synthesizer instructions), each formant datum (speech synthesizer instruction) identifying phonemes (a fundamental sound) and stress assignments (at least one control parameter) for controlling generation of spoken words (a waveform) corresponding to the phonemes (fundamental sound) (Col. 4, lines 21-34); and
- (c) transmitting compressed data stream (sequences of the speech synthesizer instructions), representing the messages, over the data communication network to subscriber terminals for waveform generation in response thereto (Col. 6, lines 10-25).

As to Claims 14,11, with respect to Figures 1-2, **Tel** teaches a communication terminal device, 104, comprising:

a data interface for receiving a data stream from a communication network (Figure 2, label 108, and Col. 5, line 66 through Col. 6, line 2);

a programmable central processing unit for processing the received data stream to capture supplemental data and formant data (speech synthesizer instructions) contained in the received data stream (Col. 6, lines 2-9);

a buffer (memory) storing inherent phonemes in formant data (a plurality of fundamental sound samples), in digitized form (Col. 6, lines 6-14 and Col. 4, lines 21-34); and

a formant synthesizer (concatenative speech synthesizer) responsive to the supplemental data and formant data (instructions), for processing samples from the memory in a full sentence

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or linguistic unit (an order) specified by the supplemental data and formant data (instructions) and to control boundary data (parameters) of a speech signal (waveform signal) synthesized from the processed samples in a manner specified in the supplemental data and formant data (instructions) (Col. 6, lines 10-29 and Col. 4, lines 35-52).

As to Claim 18, Tel teaches a terminal as in Claim 14, further comprising:

- a keyboard for supplying user inputs to the programmable central processing unit; and a display for displaying information provided by the programmable central processing unit (Figure 3, labels 107B)
- 3. Claims 1,12,14 are rejected under 35 U.S.C. 102(e) as being anticipated by Richard et al. (US 5,924,068).

As to Claims 1,12,14, with respect to Figures 1-2,18, **Richard** teaches a system comprising: a text marker 110 (server) coupled to a transmission medium 310 (data communication network) said server being programmed to execute sequences of program instructions for:

- (a) obtaining textual information for forming news articles (messages) for people (a plurality of subscribers) (Figures 1-2),
- (b) performing a significant portion of a text to speech process to convert the textual information of at least one of the news articles (messages) to unmatched words and operator inserts (speech synthesizer instructions) (Figure 2, labels 210,214), and

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(c) transmitting the unmatched words and operator inserts (speech synthesizer instructions) over the transmission medium (data communication network) (Figure 3); and a subscriber terminal for receiving the unmatched word and operator inserts (speech synthesizer instructions) via the transmission medium (data communication network) (Figure 4), said subscriber terminal comprising a speech synthesizer for synthesizing a speech wave form signal representing the at least one message from the speech synthesizer instructions (Figure 18).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 19-20,22-23,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. (US 5,835,087) in view of Tel.

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As to Claims 19,22-23,25, with respect to Figure 2, **Herz** teaches a method of providing personalized information services, comprising:

storing search profiles (separate profiles) relating to articles of interest (topics of interest) to users (a plurality of individual subscribers) (Col. 55, lines 54-67);

receiving new articles (items of information) from servers (a plurality of sources) (Col. 55, lines 54-67);

comparing the new articles as target profiles (items of information) to the search profiles (subscriber profiles) to identify articles of interest (items of interest) to particular users (subscribers) (Col. 55, lines 54-67);

Herz does not teach the following limitations:

converting textual information relating to at least some of the identified items of interest to sequences of speech synthesizer instructions;

transmitting each of the sequences of instructions to one or more terminals, each termial being utilized by a subscriber;

storing received sequences of instructions in respective subscriber terminals; in response to one of the sequences of instructions, retrieving sound samples from memory in a subscriber terminal in an order specified by the one sequence of instructions and adjusting process parameters for the retrieved samples in a manner specified by the one sequence of instructions, to thereby generate a speech waveform signal representative of one of the identified items of interest;

Tel teaches a system which converts text information to formant data and supplemental data (speech synthesizer instructions), transmits the information to user terminals, stores the formant data and supplemental data and generates speech in accordance with the formant data and supplemental data (Col. 6, lines 6-29 and Col. 4, lines 21-52). Tel teaches that it is desirable or essential to present users with textual information orally and to present the oral information with voice characteristics (Col. 1, lines 32-44 and Col. 2, lines 2-8). Herz only teaches the

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transmission of textual information to users but similarly performs analogous requests and reception of information (Col. 58, lines 26-56). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add the speech synthesizer capabilities to **Herz's** invention for transmitting voice characteristics information to users as taught by **Tel's** invention in order to provide a user with an oral version of text information.

As to Claim 20, Herz does not teach computing and converting linguistic parameters into speech synthesizer instructions.

However, Tel teaches a system which computes and converts linguistic parameters into speech synthesizer instructions (Col. 6, lines 6-29 and Col. 4, lines 21-52). Tel teaches computing linguistic boundaries (Col. 4, lines 22-26 and 50-52). Herz only teaches the transmission of textual information to users but similarly performs analogous requests and reception of information (Col. 58, lines 26-56). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add the linguistic capabilities to Herz's invention for transmitting voice characteristics information to users as taught by Tel's invention in order to provide a user with an oral version of text information in complete sentences.

7. Claims 21,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz in view of Tel and further in view of Parzych (US 6,115,384).

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As to Claims 21,24, Herz teaches the method as in claim 19, wherein the step of transmitting comprises:

Herz does not teach the following limitations:

"transmitting at least some of the sequences of instructions over a wireless data link to a plurality of the respective subscriber terminals"

However, **Herz** teaches laptop computers which are movable systems and suggests wireless networks and wireless data links (Col. 30, lines 38-42).

Parzych teaches laptop computers connected to wireless CDPD networks via modems which makes requests for information (Figure 3, labels 46,48 and Col. 6, lines 29-51). Parzych also teaches that information access in the future will be more so with wireless networks than wireline networks (Col. 2, lines 11-20).

Tel teaches a system which converts text information to supplemental data (speech synthesizer instructions), transmits the information to user terminals, stores the supplemental data and generates speech in accordance with the supplemental data (Col. 6, lines 6-29 and Col. 4, lines 21-52).

Therefore, having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add wireless access capability to Herz's invention for wireless connectivity as taught by Parzych's invention and to receive supplemental data as taught by Tel's invention in order to provide users with more access to information using wireless networks and oral versions of text information.

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8. Claims 27,26 rejected under 35 U.S.C. 103(a) as being unpatentable over Tel in view of Boss et al. (US 5,915,237).

As to Claim 27 with respect to Figures 1-2, Tel teaches a system comprising:

a server coupled to a data communication network, said server being programmed to execute sequences of program instructions for:

- (a) obtaining textual information for forming messages for a plurality of subscribers,
- (b) performing a significant portion of a text-to-speech process to convert the textual information of at least one of the messages to speech synthesizer instructions in the form of formant data and supplemental data (MIDI (Musical Instrument Digital Interface) commands), and
- (c) transmitting the speech synthesizer instructions over the data communication network; and

a subscriber terminal for receiving the speech synthesizer instructions via the data communication network, said subscriber terminal comprising a speech synthesizer for synthesizing a speech waveform signal representing the at least one message from the speech synthesizer instructions;

Tel does not teach the following limitation:

"MIDI (Musical Instrument Digital Interface) commands"

Boss teaches a need for using MIDI commands to provide a compact representation of speech signals in digital format and which permits accurate and natural sounding reconstruction of speech signals (Col. 1, lines 49-65, Col. 2, lines 55-61, Col. 3, lines 11-18, 28-37). These

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teachings show that prosodic parameters from voice sources are associated with speech segments and encoded using a standard digital MIDI format to provide natural sounding speech. Tel teaches analogous production of natural sounding speech from text sources and voice sources (Col. 4, lines 21-34 and Col. 7, lines 18-22). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add standard MIDI digital capability to Tel's invention for encoding prosodic information and associating the prosodic information with speech as taught by Boss's invention in order to provide accurate and natural sounding speech during text to speech conversions.

9. Claims 4,8,10,13,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tel in view of Herz.

As to Claims 4,15, Tel teaches the system as in claim 3, wherein the interface comprises capability for making requests;

Tel does not teach the following limitation:

"a modem"

Herz teaches a modem which is used to perform analogous requests and reception of information (Col. 28, lines 55-60). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add modem capability to Tel's invention for connecting to servers as taught by Herz's invention in order to provide a user with data and telephone communications.

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As to Claims 8,10,13, Tel teaches a system as in Claim 7, further comprising an information database (news information server), said server being programmed to execute sequences of program instructions for:

"Storing profile information regarding news topics of interest to individual subscribers; Receiving and storing news items from one or more sources;

Comparing the stored news items to the stored profile information to identify news items of interest to each individual subscriber;

Addressing mail messages containing text information representing the items of interest to subscribers mail boxes in the mail system; and

Transmitting the mail message containing text information representing the items of interest to the mail system"

Herz teaches the storing, receiving, comparing, addressing and transmitting limitations above (Col. 55, lines 54-67 and Col. 58, lines 35-42). Tel teaches that the information database can analogously store converted information and transmit the information at schedule times. In addition, Tel analogously teaches retrieving information based upon requests made to the information database (Col. 5, lines 57-65 and Col. 3, lines 60-65). Therefore, having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add the mailbox capability to Tel's invention for storing messages as taught by Herz's invention in order to provide real-time delivery or later delivery of user's messages.

10. Claims 5-6,16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tel** in view of **Herz** and further in view of **Parzych**.

As to Claims 5-6,16-17, **Tel** teaches the system as in claim 4 wherein the system does not comprise a modem;

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Tel does not also teach the following limitation:

"a wireless network data modem"

However, Herz teaches a modem as shown in Claim 4 above. In addition, Herz teaches laptop computers which are movable systems and suggests wireless networks and wireless network modems (Col. 30, lines 38-42). Parzych teaches laptop computers connected to wireless CDPD networks via modems (CDPD modems) which makes requests for information (Figure 3, labels 46,48 and Col. 6, lines 29-51). Parzych also teaches that information access in the future will be more so with wireless networks than wireline networks (Col. 2, lines 11-20). Therefore, having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add wireless access capability using modems for obtaining information as taught by Parzych's invention in order to provide users with more access to information using wireless networks.

Response to Arguments

11. Applicant's arguments with respect to claim 1-27 in the 8/28/01 Response have been considered but are moot in view of the new ground(s) of rejection and the following:

Examiner agrees with the convincing arguments in the Response. Examiner has reviewed the prior art of record, the prosecution history and the claims. Examiner respectfully believes that the prior art of record teaches the claims as indicated in the instant office action.

Examiner is also sorry for not applying the prior art of record properly before so that a satisfactory conclusion of the prosecution of this application could be met. In this regard,

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Examiner respectfully hopes that Applicants will review the instant office action based on the new grounds of rejection and see that the prior art of record teaches the claims.

The difference between **Tel** and the disclosed invention is where the vocabulary of sound samples is stored. In **Tel**, it is stored in the server (Col. 4, lines 17-34 and Figure 2). In the disclosure, it is stored in the terminal (Page 10, lines 8-11). Also, the difference between **Richard** and the disclosure is that processing the <u>Pdata</u> (speech synthesizer instructions) is performed manually in **Richard** and automatically in the disclosure. Examiner proposes the following amendments to the independent claims for overcoming the prior art of record and placing the application in a condition for allowance:

Claim 1

Line 17, after "—synthesizer—" add "—and associated vocabulary of stored fundamental sound samples—"

Claim 12

Line 10, after "—sound—" add "—stored in a vocabulary of a subscriber terminal—"

Claim 14

Claim 19

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Line 19, after "-memory-" add "-comprising a vocabulary-"

Claim 27

Line 6, after "-performing-" add "-automatically-"

Line 12, after "—synthesizer—" add "—and associated vocabulary of stored fundamental sound samples—"

Also, Examiner respectfully invites Applicants to contact Examiner to discuss any disagreement with the proposed amendments, Applicants' own suggestions, or application of the prior art of record to resolve any disagreements and to finally reach a satisfactory conclusion of the processing of this application.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

None

13. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231 or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Allan Hoosain** whose telephone number is (703) 305-4012. The examiner can normally be reached on Monday to Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Fan Tsang**, can be reached on (703) 305-4895.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Allan Hoosain Primary Examiner 7/2/04